

## ABSTRACT OF THE DISCLOSURE

A plasma processing method which supplies plasma processing gas into a plasma process chamber, sets the pressure inside the plasma process chamber to the preset value, and generates plasma by capacitatively coupled discharge,

5 emission of electromagnetic wave by radio frequency displacement current and formation of magnetic field, thereby processing a substrate. The plasma processing controls the radiated electromagnetic wave power by the radio frequency displacement current control means forming a resonant circuit, and

10 processing a substrate while plasma distribution is controlled during plasma processing.